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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,366	12/03/2003	Bo-Xun Xian	XIAN3002/BEU	3119
23364	7590	07/19/2006	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			PHU, SANH D	
			ART UNIT	PAPER NUMBER
			2618	

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/725,366	<b>Applicant(s)</b> XIAN ET AL.	
	<b>Examiner</b> Sanh D. Phu	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133) Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/03/06.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

DETAILED ACTION

*Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Yen et al (6,275,682).

Regarding to claim 1, Yen et al disclose see Fig. 2 and 3, col. 3, lines 13, to col. 4, 20, that a multiple frequency wireless receiver(24) for computer peripheral devices, connecting to a computer via an interface (24, 20), comprising: a receiving unit (24) for receiving at least two frequencies (211,221,231); an oscillator (24221) for generating a single oscillating signal; a mixer(24222) coupled to the receiving unit, and for mixing the at least two mixed signals with the single oscillating signal to obtain two mixed signals of

different frequency (see col. 3, line 23); at least two filters (24311, 24312, 24313) coupled to the mixer (24222) and tuned to different frequencies to respectively allow one of the two mixed signals of different frequency to pass therethrough (see Fig. 3), and to send the respective filtered mixed signals to a mixed-signal processing unit (244); wherein the mixed-signal processing unit further processes and transforms the mixed signals into at least two commands (Ascii code for keyboard or rs232 for a mouse)(see col. 4, lines 18–20) for sending to the computer via the interface (see Fig. 2 and 3).

Regarding to claim 2, Yen et al disclose the wireless receiver wherein the mixed-signal processing unit (244) further has at least two demodulation units (24331, 24332, 24333) connected to receive outputs of the respective filters (24311, 24312, 24313), and a micro control unit (microprocessor)(see col. 4, line 15) for transforming the mixed signals into said at least two commands (see Fig. 3).

Regarding to claim 3, Yen et al disclose the wireless receiver wherein the interface includes at least a pair of PS2 ports (serial port, RS 232 or PS2) for respectively sending at least two commands (see col. 4, lines 15–20).

Regarding to claim 4, Yen et al disclose the wireless receiver wherein the interface is a USB port for sending at least two commands (ASCII code for keyboard or serial code for a mouse) (see col. 4, lines 15–20).

Regarding to claim 6, Yen et al disclose the wireless receiver wherein the receiver is arranged to receive wireless command signals from a wireless mouse and a wireless keyboard (see col. 4, lines 15–20).

*Claim Rejections – 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yen et al.

Regarding to claim 5, Yen et al disclose the wireless receiver wherein the first frequency is 906.7 MHz, the second frequency is 902 MHz, the oscillator

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generates a frequency of 896 MHz, the first filter is tuned to 10.7 MHz, and the second filter is tuned to 6.5 MHz.

However, it would have been obvious for matter of design choice to modify the Yen et al reference by using a transmission first frequency is 27.045 MHz, the second frequency is 27.095 MHz, the oscillator generates a frequency of 26.59 MHz, the first filter is tuned to 455 KHz, and the second filter is tuned to 505 KHz, since applicant has not disclosed that having such a frequency range solves any stated problem or is for any particular purpose, and it appears that a similar frequency range would perform equally well.

### *Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanh D. Phu whose telephone number is (571)272-7857. The examiner can normally be reached on M-Th from 7:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-

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4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sanh D. Phu  
Examiner  
Division 2618

SP

6/30/06  
SANH D. PHU  
PATENT EXAMINER

*[Handwritten signature]*